

In the Claims

1-30 Cancelled

31. (new) A system for the modification of a knee, the system comprising a knee implant that provides a first major surface adapted to be positioned upon a tibial plateau, and a second major surface adapted to be positioned against a femoral condyle, the second major surface being provided with a femoral glide path to facilitate its performance in situ, the implant further comprising one or more tibial projections in order to improve fixation in situ.

32. (new) A system according to claim 31, the glide path being in the form of a generally central depression.

33. (new) A system according to claim 31, the tibial projection(s) being adapted to extend distally over a rim of a tibial plateau.

34. (new) A system according to claim 31 wherein the glide path is in the form of a generally central depression about 0.5 mm to about 5 mm deep at its lowest point.

35. (new) A system according to claim 31 wherein the glide path is in the form of a generally central depression about 20 mm to about 50 mm in length by 10 mm to 30 mm in width.

36. (new) A system according to claim 31 wherein the glide path is in the form of a generally central oval depression about 0.5 mm to about 5 mm deep at its lowest point.

37. (new) A system according to claim 31 wherein the glide path is in the form of a generally central oval depression about 20 mm to about 50 mm in length by 10 mm to 30 mm in width.

38. (new) A system according to claim 31 wherein the tibial projection(s) are adapted to catch the posterior portion of the tibial plateau by extending over the rim of the tibial plateau distally.
39. (new) A system according to claim 31 wherein the knee implant has dimensions on the order of between about 31 to about 60 mm in the anterior-posterior dimension.
40. (new) A system according to claim 31 wherein the knee implant has dimensions on the order of between about 20 mm to about 40 mm in the medial-lateral dimension.
41. (new) A system according to claim 31 wherein the knee implant has a maximum thickness, at the posterior lip, of between about 8 mm and about 20 mm.
42. (new) A system according to claim 31 wherein the knee implant has a maximum thickness, at the posterior lip, of about 3 mm to about 10 mm greater than the thickness of the implant at the center.
43. (new) A system according to claim 31 wherein the knee implant has dimensions on the order of between about 31 to about 60 mm in the anterior-posterior dimension, between about 20 mm to about 40 mm in the medial-lateral dimension, and a maximum thickness, at the posterior lip, of between about 8 mm and about 20 mm, or about 3 mm to about 10 mm greater than the thickness of the implant at the center.
44. (new) A system according to claim 33 wherein the glide path is in the form of a generally central oval depression about 0.5 mm to about 5 mm deep at its lowest point and about 20 mm to about 50 mm in length by 10 mm to 30 mm in width.
45. (new) A system according to claim 31 wherein the second major surface comprises a shape that serves as the femoral glide path and the implant includes a posterior lip to provide

fixation to the tibia, the implant providing a replacement for articular cartilage and meniscus to restore alignment of a knee.

46. (new) A system according to claims 45, wherein the first surface is generally convex.

47. (new) A system according to claim 45, wherein the second surface is generally concave.

48. (new) A system according to claim 45, wherein the implant includes a generally kidney shape.

49. (new) A system according to claim 45, wherein the first surface has an indentation to accommodate a tibial spine.

50. (new) A system according to claim 45, the implant having a central portion and a peripheral thickness, the peripheral thickness being generally thinner than the thickness of the central portion.

51. (new) A system according to claims 45, wherein the first surface is generally convex and has an indentation to accommodate a tibial spine, the second surface is generally concave, the implant is generally kidney shaped, the implant having a central portion and a peripheral thickness, the peripheral thickness being generally thinner than the thickness of the central portion.

52. (new) A system according to claim 31 wherein the implant comprises a material selected from the group consisting of polyurethanes, polyethylenes, polypropylenes, Dacrons, polyureas, hydrogels, metals, ceramics, epoxies, polysiloxanes, and polyacrylates.

53. (new) A system according to claim 31 wherein the implant comprises a polymer.

54. (new) A system according to claim 31 wherein the second major surface has a femoral surface shape that serves largely as a glide path with respect to the femoral condyle in order to provide a replacement for the function of articular cartilage as well as meniscus, and particularly at the central weight-bearing area, in order to restore alignment.

55. (new) A system according to claim 54 wherein the first major surface is convex and the implant is adapted to remain substantially permanently anchored in place by the combination of the femoral glide path and convexity of the first major surface of the implant, together with a posterior mesial lip.

56. (new) A system according to claim 55 wherein the implant provides an indentation adapted to accommodate the tibial spine, as well as a slight feathering of the implant on the underside at the tibial spine, a general kidney shape, and a convex first major surface, which together permit the implant to be congruent with the concave tibia and the posterior mesial lip that extends over the posterior portion of the tibia and into the mesial side of the tibia into the PCL fossa of the tibia.